

MEMORANDUM**DATE:** May 10, 2007**TO:** Division of Shellfish Sanitation Staff**FROM:** Julie Ray, Program Manager
Division of Shellfish Sanitation**THROUGH:** Robert E. Croonenberghs, Ph.D., Director
Division of Shellfish Sanitation**SUBJECT:** New Shellfish harvest regulations and implementation**Purpose**

The purpose of this working memo is to provide guidance to the Virginia Department of Health, Division of Shellfish Sanitation Field Directors and Shellfish Specialists in implementing the *Virginia Administrative Code* 4VAC 20-720-105. "Public Health and Warm Water Harvest Restrictions." This emergency chapter goes into effect on May 15 through September 30, 2007, and in subsequent years will be in effect from May 1 until September 30.

Introduction

The public health reason behind 4VAC 20-720-105 is to prevent further illness from *Vibrio parahaemolyticus* and *V. vulnificus* in Virginia waters. These pathogenic bacteria occur naturally and are not associated with human sewage or animal waste, but can cause disease due to the consumption of raw oysters harvested during the warm weather months. To minimize the risk of illness the Division of Shellfish Sanitation and the Marine Resource Commission have placed certain controls on the harvesting of shell stock oysters. The *Vibrio* pathogens may be present in relatively low numbers at the time that shellfish are harvested, but may increase to more hazardous levels if they are exposed to time/temperature abuse. To minimize this risk, we are placing limits on the time between the harvest and refrigeration of oysters.

Discussion

The *Virginia Administrative Code* now states "*It shall be unlawful for any person to harvest or attempt to harvest market oysters, from public or private grounds, prior to one hour before sunrise or after 10:00 a.m., from May 15 through September 30. Oysters harvested before 10:00 a.m. from May 15 through September 30, shall be refrigerated by 10:00 a.m. that same day, except that: 1) This shall not apply to the harvest of seed oysters or the customary husbandry processes associated with aquaculture of oysters. 2) This shall not apply to the harvest of oysters, if there is a Virginia Department of Health, Division of Shellfish Sanitation – approved refrigeration system or ice storage area, for the oysters, on board the harvest vessel. 3) This shall not apply to the harvest of oysters when there is a verifiable documentation, such as a log*

book or GPS trip documentation, of a time duration, from harvest to landing, of less than 2 hours.

The harvesters will now have to land before 10 a.m. and have the product under mechanical or ice refrigeration on a truck or at a dealer by 10 a.m. Any harvester who wishes to be out after 10 a.m. will need to have mechanical or ice refrigeration on the boat, or harvest within a 2-hour period after 10:00 a.m. Implementation by the Shellfish Specialists will be discussed in the following policy section. Vessels used for the harvest of market oysters shall have shading over the area that serves as storage for the oysters. This cover is to be used from May 15 through September 30 of this year and in subsequent years starting at May 1.

Policy

Application for Certificate approval of refrigeration

The Division of Shellfish Sanitation Specialists will be charged with inspecting individual harvester's boats and issuing Certificates of Approval to harvesters approving mechanical refrigeration systems and ice storage areas for a seasonal period of May 1 until September 30 to expire annually. The Division is given this authority by *Virginia Code § 28.2-802. A. For the purpose of carrying out the provisions of this chapter, the State Health Commissioner and the Commissioner of Marine Resources or their designees may enter any establishment located in the Commonwealth, where crustacea or shellfish may be found.* The word "establishment" is defined as *any vehicle, vessel, property or premises where crustacean, finfish, or shellfish are transported, held, stored, processed, packed, repacked, or pasteurized in preparation for marketing.* An Oyster Harvest Vessel Inspection Request form supplied by the Division is to be filled out by the harvester who wishes to obtain a Certificate of Approval. This Certificate can be issued at time of inspection along with an inspection sheet describing the harvester's means of refrigeration. The Request Form can then be sent to Richmond for filing. A copy of the Certificate should be given to the Certified Dealers by the harvesters, to keep as part of their Receiving CCP requirement.

Mechanical refrigeration requirements

Inspection of mechanical refrigeration of the harvester's boat must be conducted with the harvester present in order to explain DSS requirements and to provide the necessary paperwork for temperature verification. On board refrigeration containers must be constructed in a manner and with materials that can be easily cleaned, maintained and resistant to wear from oyster shells. *The containers shall be kept clean with potable water or water from an approved shellfish growing area and provided with effective drainage, Model Ordinance IX. Transportation 01.B(1)..* The cooling capacity must be capable of cooling and maintaining the container to a temperature of 45 ° F or less. The harvester shall have a thermometer capable of measuring in 2° increments, to be kept on board the vessel. This thermometer shall be used to ensure that the unit is capable of reaching temperature before shellstock is placed in the container and the container is closed. This check is to be performed and recorded weekly by the harvester during periods of harvest activity from May 1 until September 30. During the initial inspection a sample temperature recording log can be given to the harvester. This log shall be in possession of the harvester at time of harvest. The log shall be required to be produced by the harvester for inspection by DSS or MRC.

Ice as a means of refrigeration

An ice storage area such as on board coolers will be allowed as an approved means of cooling shellstock. The ice shall be made from potable water in a commercial ice machine and be stored in a safe and sanitary manner to prevent contamination. The materials of the coolers used to hold the oysters and ice must be smooth, easily cleanable and resistant to wear from oyster shells. It is recommended that these coolers be of commercial grade and preferably constructed from high density polyethylene. The cooler must be self-draining so shellstock are not placed in containers with standing water. The coolers shall be kept clean with potable water or water from an approved area. A reasonable amount of ice will be considered adequate refrigeration and will be up to the determination of the individual inspector. The coolers are to be inspected in place and the Certificate issued as in mechanical refrigeration.

Transportation

Though not addressed in the *Virginia Administrative Code*, the NSSP Model Ordinance (MO) IX .*Transportation Requirements for the Harvester/Dealer 01. Trucks or Other Vehicles Used to Transport Shellstock to the Original Dealer. C. Shellstock shall be transported in adequately refrigerated trucks when the shellstock have been previously refrigerated or when ambient air temperature and time of travel are such that unacceptable bacterial growth or deterioration may occur.* Since the Commissioner of Health has formally adopted the MO as Departmental policy, this section provides the Division with the authority to require mechanical or ice refrigeration by harvesters and aquaculturists during transport. We should not see any harvester delivering shellstock that is not under some means of refrigeration, either mechanical or ice, unless it is that day's catch and is being delivered by 10:00 a.m..

Dealers

Division of Shellfish Sanitation Certified Dealers as part of their HACCP Plan CCP Receiving shall add to their critical limits that from May 1 until September 30 they will receive only unrefrigerated shellstock oysters before 10:00 a.m. or harvested within a 2-hour period after 10:00 a.m. Monitoring will be by time received, and if after 10:00 a.m by verifying 2 hours harvest limit. The dealer shall not purchase shellstock after 10:00 a.m. from any harvester that does not have a Certificate of Approval, verifying that DSS approved their on board mechanical or ice refrigeration. A copy of this Certificate is to be kept with the dealer's HACCP records as proof that the product is from an approved licensed harvester. The dealer's HACCP receiving record, in addition to the MO requirements already in place, should verify that the oysters were received by 10:00 a.m., received under refrigeration, or received from a harvester within 2 hours from start of harvest. The dealer is responsible for verifying the harvester's trip logs and checking trip documentation. An Example Dealer HACCP Plan and Receiving Record can be provided by DSS to the dealers upon request.